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Scott E. Gibson
Indiana University - Purdue University Fort Wayne

Bruce A. Kingsbury
Indiana University - Purdue University Fort Wayne, kingsbur@ipfw.edu

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Scott E. Gibson, Bruce A. Kingsbury
Sponsor: Bruce Kingsbury
Department of Biology
Indiana University-Purdue University Fort Wayne

An important component of both ecological research and conservation efforts is the investigation of spatial utilization. In Indiana, we are only beginning to understand the spatial ecology of the state endangered timber rattlesnake. Expanding on previous efforts, we radio-tracked nineteen timber rattlesnakes (7 males, 6 females, 2 gravid females, 4 juveniles) for a complete activity season to determine patterns of movement and seasonal activity ranges. Activity ranges were calculated using minimum convex polygon and kernel density methods. Trends show that males have the largest seasonal activity range followed by females, gravid females, and juveniles. Observed movement patters differed greatly for these snake classes. Males were characterized by extensive movements in late summer while juvenile snakes initially traveled a short distance from their hibernacula and then remained in a relatively small area until ingress in the fall. Gravid females remained relatively sedentary during this time. Non-gravid females made frequent, short movements exhibiting little alteration throughout the active season. Final results from this study will allow for a more detailed understanding of the spatial requirements of the timber rattlesnake in Indiana and facilitate any further conservation efforts.